Table 46b

Distribution of external relationships that involve research and development activities for innovators, by selected company characteristics: 2001

(Percent distribution)

Characteristic	Total	Percent involving research and development			Names
		None	Less than 25	25 or more	Nonresponse
Innovators ¹	100.0	26.3	52.8	17.0	3.9
IT	100.0	20.3	51.7	25.0	S
Manufacturing	100.0	21.0	49.9	25.4	S
Communication	100.0	19.3	49.4	25.6	S
Computer related services	100.0	20.3	52.8	24.7	S
Non-IT	100.0	28.1	53.2	14.5	S
Manufacturing	100.0	S	55.4	S	S
Transportation & public utilities	100.0	29.9	57.5	S	S
Finance, insurance & real estate	100.0	36.0	46.0	S	S
Engineering & AAB services	100.0	28.6	51.0	18.4	S
By revenue size					
\$2.5M to \$4.9M	100.0	21.8	50.9	21.9	S
\$5M to \$9.9M	100.0	30.9	52.8	12.2	S
\$10M to \$24.9M	100.0	31.3	52.2	12.3	S
\$25M to \$50M	100.0	S	66.5	S	S
Above \$50M	100.0	29.9	46.1	22.8	S

¹ To be classified as an innovator, the company had to indicate that it had developed a product or process in the past 12 months or believed it would develop a product or process in the next 12 months as a result of IT-based innovation. The survey was conducted during the period July 2001–April 2002.

KEY: IT=information technology; AAB=accounting, auditing, bookkeeping; S=suppressed for reasons of reliability due to receiving less than 20 responses

NOTES: Responses are to question 15-2: "You indicated that your company engages in internal research and development, and that alliances, partnerships, or joint ventures contribute to your company's IT-based innovation. What percentage of these external relationships involve R&D activities—excluding contract R&D?" This question was only asked of innovators. The category "More than 25 percent" represents a response of 25 to 50 percent, or more than 50 percent to this question. Total nonresponse consists of item nonresponse and don't know responses. Percentages are calculated excluding 223 cases, representing 8,600 companies that reported the question to be not applicable for their company. Percentages are based on unrounded frequencies and may not total 100 due to rounding.

IT is defined as the hardware and software that support the production or use of computer-based information systems, the infrastructure necessary to access such information systems, or data processing services. Companies are classified as IT or Non-IT based on their 4-digit SIC number. IT Manufacturing includes companies with SICs of 3571-3579, 3651, 3661-3679, 3695, 3823-3826. IT Communication includes companies with SICs of 4812-4822, 4833, 4841-4899. IT Computer related services includes companies with SICs of 7371-7379. Non-IT Manufacturing includes companies with SICs of 5091-3694, 3699-3822, 3827-3999. Non-IT Transportation & public utilities includes companies with SICs of 4011-4231, 4412-4789, 4911-4971. Non-IT Finance, insurance & real estate includes companies with SICs of 6011-6036, 6081-6153, 6159, 6162-6799. Non-IT Engineering & AAB services includes companies with SICs of 8711, 8721.

SOURCE: National Science Foundation, 2001 Information Technology Innovation Survey.